

# **Regulatory Activities Related to Power Reactors Transitioning to Decommissioning**

**Category 2 Public Meeting  
with NEI/Industry Representatives  
April 23, 2015**

# Agenda

---



13:00 Meeting Kickoff  
13:10 NRC Introductory Remarks  
13:15 NEI Introductory Remarks  
13:20 NEI Perspective on Topics  
13:40 NRC Perspectives on Topics

- Bill Huffman  
- Meena Khanna  
- Mark Richter and Pam Cowan  
- NEI  
- NRC

## Topical Discussions

13:55 Security  
14:10 Fitness for Duty  
14:25 Aging Management  
14:40 10 minute break  
14:50 Certified Fuel Handler Training  
15:05 Emergency Preparedness  
15:15 Exemption Process Feedback  
15:25 Integrated Rulemaking  
15:35 Opportunity for public comments or questions  
15:50 Closing Remarks  
16:00 Meeting adjourned

- NEI / Industry / NRC  
- NEI / Industry / NRC  
- NEI / Industry / NRC  
  
- NEI / Industry / NRC  
- NEI / Industry / NRC  
- NEI / Industry / NRC  
- NEI / Industry / NRC  
  
- NEI / NRC

# NUCLEAR SECURITY DECOMMISSING ACTIVITIES

*Gary Purdy*  
*Division of Security Policy*  
*Office of Nuclear Security and Incident Response*

## Decommissioning Activities

- Licensee 50.54 (p) Physical Security Plan Change Submissions
- Status update: Interim Staff Guidance (ISG-03) - Review of Security Exemptions/License Amendment Request for Decommissioning Nuclear Power Plants

## **Fitness For Duty**

# **Fatigue Management for Security Personnel and Drug & Alcohol Testing at a Decommissioning Power Reactor Facility**

# Presenters



Will Smith, NSIR/DSP/SPSB

[will.smith@nrc.gov](mailto:will.smith@nrc.gov), (301) 287-3541

Mike Montecalvo, NRR/DRA/APHB

[michael.montecalvo@nrc.gov](mailto:michael.montecalvo@nrc.gov), (301) 415-1678

Kamishan Martin, NRR/DRA/APHB

[Kamishan.martin@nrc.gov](mailto:Kamishan.martin@nrc.gov), (301) 415-3469

# Discussion Topics



- Background
- Discussion
- Conclusion
- Path Forward
- Other Considerations



## Background



- § 26.3(a) Scope, states in part, “licensees who are authorized to operate a nuclear power reactor under 10 CFR 50.57”
- § 73.55 objective is to
  - Provide high assurance that activities involving special nuclear material are not inimical to the common defense and security and do not constitute an unreasonable risk to the public health and safety,
  - Assure the physical protection program protects against the design basis threat of radiological sabotage as stated in § 73.1, and
  - Assure the physical protection program is designed to prevent significant core damage and spent fuel sabotage



## Discussion

- Part 26, Subpart I applies to reactors authorized to operate under § 50.57
  - Licensees that have provided both certifications under § 50.82 are not listed in the scope of § 26.3, therefore Part 26, Subpart I, does not apply to decommissioning reactors
- Decommissioning facilities must continue to implement the physical protection requirements described in § 73.55 in order to provide high assurance of protection against the DBT (§ 73.1)
- Licensees shall maintain and implement their Commission-approved security plan as long as they maintain a Part 50 license
- Security personnel must maintain the common defense and security, so it is necessary to ensure that they are not subject to fatigue, which could reduce their alertness and ability to perform the critical job duties of identifying and promptly responding to plant security threats.

## Conclusion



- Part 26, Subpart I, fatigue management provisions do not apply to decommissioning reactors
- Security requirements and the design basis threat are the same for a decommissioning power plant as they are for operating plants
- Security needs to continue to implement the physical protection requirements described in § 73.55
- NRC staff believes that security personnel must have adequate fatigue management in order to perform the critical job duties of identifying and promptly responding to plant security threats

## Path Forward



- Short term: Staff has been tasked to work with NEI to determine if there could be a near-term solution until rulemaking is complete
- Long term outlook, rulemaking: Staff will pursue rulemaking
  - In response to SECY-14-0118, Commission SRM dated December 30, 2014, advised staff to proceed with decommissioning rulemaking. The SRM further stated that staff should pursue “any other issues deemed relevant by the NRC staff.” This will include concerns related to fatigue management for security personnel at decommissioned sites

## Other Considerations



- Drug and alcohol (D&A) testing not explicitly required by Part 26 for decommissioning sites
- § 73.55(b)(9) Insider Mitigation programs include provisions for D&A testing
- Updating Reg Guide 5.77, Insider Mitigation
- Drug and alcohol testing
  - In response to SECY-14-0118, Commission SRM dated December 30, 2014, advised staff to proceed with decommissioning rulemaking. The SRM further stated that staff should pursue “any other issues deemed relevant by the NRC staff”
  - Staff will consider whether drug and alcohol testing should be included in this rulemaking

# Certified Fuel Handler (CFH) Programs

## Presenters and Contributors



Brian Green, Ph.D. NRR/DRA/APHB

[brian.green@nrc.gov](mailto:brian.green@nrc.gov), (301) 415-6728

George Lapinsky, NRR/DRA/APHB

[george.lapinsky@nrc.gov](mailto:george.lapinsky@nrc.gov), (301) 415-0892

Molly Keefe, NRR/DRA/APHB

[molly.keefe@nrc.gov](mailto:molly.keefe@nrc.gov), (301) 415-5717

# Discussion Topics

- Background
  - Applicable Regulations
  - Issues Not Covered by Regulation
- Discussion
  - Preferred Transition Process
  - Related Training Documents
- Conclusions



## Applicable Regulations & Staff Positions



- 1996 “Decommissioning of Nuclear Power Reactors”
- 10 CFR 50.2 – Definition of CFH
  - SECY-00-145 – Indicates necessary skills
- 10 CFR 50.120 – Training and Qualification
- 10 CFR 55.4 – Systems Approach to Training (SAT)



## Issues Not Explicitly Covered by Regulation



- No regulations indicate when CFH programs must be implemented
- Standards for implementing CFH programs are unclear
  - NUREG-1220 is for non-licensed training programs which should include CFH, but it is not explicitly stated
  - Including CFH has been intended since SECY 00-145

## Preferred Transition Process



- CFH Programs must meet:
  - 10 CFR 50.2 – Meet definition of CFH
  - 10 CFR 50.120 – Training and Qualifications
  - 10 CFR 55.4 – SAT Based Process
- The CFH program can be approved and in place **PRIOR** to termination of Operator Licenses
- CFH Programs can be submitted for review early in the design cycle

## Related Training Documents



- NRC does not have a standard directly applicable to CFH
  - NUREG-1220 –guidance for NRC inspectors reviewing SAT based programs
    - General applicability to SAT programs
      - 10 CFR 50.120 & 10 CFR 55.4
      - Reasonable for CFH programs
- Refresher Training (every 2 years)
  - Inspection Procedure IP88010

## Conclusions

- Having a CFH program approved prior to decommissioning prevents potential safety issues related to training/qualification.
  - Licensees can submit programs for review long before planned decommissioning.
- Specific standards for implementing CFH programs do not exist. However general SAT based guidance provides insight:
  - NUREG-1220
  - IP88010

# Power Reactor Decommissioning Rulemaking

Jason Carneal  
Rulemaking Project Manager  
NRR/DPR/PRMB

# Reactor Decommissioning Rulemaking



In SRM SECY-14-0118, the Commission stated that the staff should perform the following:

- Proceed with rulemaking on decommissioning;
- Set an objective of early 2019 for completion of this rulemaking; and
- Continue processing current and pending applications for decommissioning amendments and exemptions until that regulatory work is complete.

# Reactor Decommissioning Rulemaking



The Commissioning also requested that the staff address the following items in the rulemaking effort:

- issues discussed in SECY-00-0145
- lessons learned from the plants going through the decommissioning process;
- the advisability of requiring a licensee's Post-Shutdown Decommissioning Activities Report to be approved by NRC;
- the appropriateness of maintaining the three existing options for decommissioning and the time frames associated with those options;
- the appropriate role of state and local governments and non-governmental stakeholders in the decommissioning process;
- and any other issues deemed relevant by the NRC staff.